

Composition of blood



**ASSIGN
BUSTER**

Composition of Blood Blood contains a nonliving fluid matrix (plasma) in which living cells (formed elements) are suspended. Blood contains 55% plasma and 45% formed elements. Plasma is over 90% water. It also contains electrolytes (salts), plasma proteins, and substances transported by blood (i. e. nutrients, hormones, etc.). The three types of formed elements are erythrocytes (RBCs), leukocytes (WBCs), and platelets

FUNCTIONS OF BLOOD functions of the blood are: to transport oxygen away from the lungs and around the body; and CO₂ from the body cells to the lungs. to transport nutrients such as glucose and amino acids from the digestive system to the cells in our bodies. to take waste products such as lactic acid away from the muscles when it's produced by anaerobic respiration; and urea from the liver to the kidneys and bladder. By maintaining a good circulation, the bloodflow keeps your core body temperature

BLOOD DISEASES blood disease, any disease of the blood, involving the red blood cells erythrocytes, white blood cells leukocytes, or platelets (thrombocytes) or the tissues in which these elements are formed—the bone marrow, lymph nodes, and spleen or of bleeding and blood clotting. Long before the nature and composition of blood were known, a variety of symptoms were attributed to disordered blood. Red blood cells were not recognized until the 17th century, and it was another 100 years before one of the types of white blood cells, the lymphocyte, and the clotting of blood (coagulation) were described. In the 19th century other forms of leukocytes were discovered, and a number of diseases of the blood and blood-forming organs were distinguished. Morphological changes—the changes in form and structure—that take place in the blood during disease and the signs and symptoms of the various blood diseases were described in the 19th century and the first

quarter of the 20th century. In the years that followed, a more physiological approach began to develop, concerned with the mechanisms underlying the development of blood disease and with the ways in which abnormalities might be corrected.